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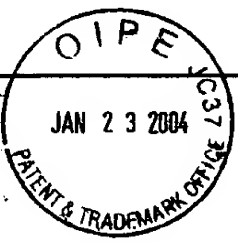
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<b>COMBINED TRANSMITTAL OF APPEAL BRIEF TO THE BOARD OF PATENT APPEALS AND INTERFERENCES &amp; PETITION FOR EXTENSION OF TIME UNDER 37 C.F.R. 1.136(a) (Large Entity)</b>	<b>Docket No.</b> DSCK-1224-C1
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In Re Application Of: **EMERSON et al.**

<b>Serial No.</b> 09/884,651	<b>Filing Date</b> 19 JUN 2001	<b>Examiner</b> HUNTER, ALVIN	<b>Group Art Unit</b> 3711
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Invention: **HIGH PERFORMANCE TWO PIECE GOLF BALL**



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TO THE COMMISSIONER FOR PATENTS:

This is a combined Transmittal of Appeal Brief to the Board of Patent Appeals and Interferences and petition under the provisions of 37 CFR 1.136(a) to extend the period for filing an Appeal Brief.

Applicant(s) hereby request(s) an extension of time of (check desired time period):

- ☐ One month      ☒ Two months      ☐ Three months      ☐ Four months      ☐ Five months

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**TOTAL FEE FOR APPEAL BRIEF AND EXTENSION OF TIME:** \$750.00

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- ☐ Please charge Deposit Account No. \_\_\_\_\_ in the amount of \_\_\_\_\_
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- ☒ Any additional filing fees required under 37 C.F.R. 1.16.
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COMBINED TRANSMITTAL OF APPEAL BRIEF TO THE BOARD OF PATENT  
APPEALS AND INTERFERENCES & PETITION FOR EXTENSION OF TIME  
UNDER 37 C.F.R. 1.136(a) (Large Entity)

Docket No.  
DSCK-1224-C1

In Re Application Of: EMERSON et al.

Serial No.  
09/884,651

Filing Date  
19 JUN 2001

Examiner  
HUNTER, ALVIN

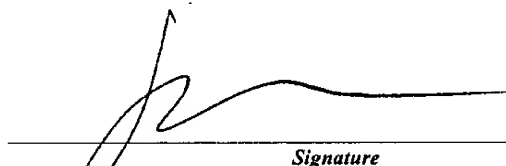
Group Art Unit  
3711

Invention: HIGH PERFORMANCE TWO PIECE GOLF BALL



TO THE COMMISSIONER FOR PATENTS:

This combined Transmittal of Appeal Brief to the Board of Patent Appeals and Interferences and petition for extension of time under 37 CFR 1.136(a) is respectfully submitted by the undersigned:

  
Signature

Dated: 23 JAN 2004

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#17  
Appeal Brief  
Emerson



PATENT  
Attorney's Docket No.: DSK-1224-C1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPELLANT: EMERSON et al.  
SERIAL NO.: 09/884,651  
FILED: June 19, 2001  
FOR: HIGH PERFORMANCE TWO PIECE GOLF BALL  
EXAMINER: HUNTER, ALVIN  
ART UNIT: 3711  
CONFIRM. No.: 3488

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**APPEAL BRIEF**

01/28/2004 SZEWDIE1 00000044 09884651

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**Real Party in Interest**

The real party in interest is Dunlop Slazenger Manufacturing LLC, which has been assigned a 100% interest in the invention corresponding to the application under appeal.

**Related Appeals and Interferences**

There are no related appeals or interferences.

**Status of Claims**

Claims 1-26 are pending and the subject of this appeal. No other claims are pending.

**Status of Amendments**

After final amendments to the claims have been submitted, but have not been entered by the Examiner. This appeal argues for the patentability of the current claims of record, which stand rejected in the office action made final.

## **Summary of Invention**

The first embodiment of the golf ball according to the present invention is best depicted in Figures 1-3.

A second embodiment of the present invention is recited in independent claim 20, depicted in Figures 3-7 and exemplified in Figure 4.

A third embodiment is recited in dependent claim 21.

A fourth embodiment is recited in dependent claim 9, depicted in Figures 3-7 and exemplified in Figure 6.

A fifth embodiment is recited in dependent claim 12, depicted in Figures 3 and 4 and exemplified in Figure 4.

The first embodiment of the golf ball according to the present invention is exemplified in claim 1, which recites a golf ball having a core with a compression in the range of about 75 PGA to about 89 PGA (see, e.g., pages 7-8 of the detailed description of the core embodied in the claims). The golf ball comprises a cover 4, the cover having a Shore D hardness of about 42-60 (see, e.g. pages 8-9 of the detailed description of the polymer cover embodied in the claims). An outer surface divided into a plurality of polygonal configurations that include polar triangles is supported at page 9 of the specification and Figures 2-6. A plurality of dimples comprising sets of dimples with each set having different diameters arranged on the outer

surface. The polar triangles only contain dimples from one set as described on pages 10-12 and exemplified in FIG. 3.

The second embodiment is exemplified in independent claim 20 and includes the additional element of arranging the dimples according to their diameters (as depicted in Figures 3-7), to produce a different dimple arrangement. The second embodiment includes a core having a compression in the range of about 68 PGA to about 78 PGA and is described on page 4 of the specification. A cover having a Shore D hardness in the range of about 42 Shore D to about 60 Shore D is included and supported on page 15.

An outer surface divided into a plurality of polygonal configurations that include triangles is part of the second embodiment and supported in Figures 2-6 and pages 9-11 of the specification. The presence of at least 392 dimples arranged on the outer surface is taught on page 12 of the specification. A first pattern of dimples associated with each triangle is taught in Figures 2-4 and pages 9-10 of the specification. A second pattern of dimples associated with each triangle is taught in Figures 2-4 and pages 9-10 of the specification. The dimples are essentially circular with each having a size defined by a diameter in the range of about 0.13 inches to about 0.15 inches. This is described in the specification at page 11-12 and 15 and

Figures 2-6. The dimples have a depth in the range of about 0.0025 inches to about 0.125 inches and are described at page 11 and 15.

The third embodiment is exemplified by claim 21 and includes a further modification of the cover material as supported at page 8 of the specification. The modification is a blend of polymers comprising a terpolymer of ethylene/methacrylic acid/n-butyl acrylate and a copolymer of ethylene/methacrylic acid. The blend has a hardness of about 53 to about 59 Shore D. The specified cover has exemplary characteristics when combined with the other features.

The fourth embodiment is exemplified by dependent claim 9 and supported by the specification. The golf ball of the fourth embodiment has an outer surface divided into a polyhedron defined as an icosahedron as depicted in Figures 2-6 and as described in the specification at pages 9-12. The surface comprises twenty triangles that further divide the outer surface. The triangles consist of a plurality of polar triangles and a plurality of equatorial triangles. The polar triangles are divided into seven rows and the equatorial triangles are divided into eight rows to obtain an outer surface consisting of subdivided triangles as depicted in Figures 5 and 6.

The fifth embodiment is exemplified by claim 12. The fifth embodiment also includes the element of having the outer surface divided into a polyhedron defined as an icosahedron. This is supported in Figures 2-6 and in the specification at pages 9-12. Additionally, this embodiment includes an element in which the sides of the equatorial triangles bisect dimples only from a second set of dimples and have vertices selected from a first set of dimples as described at pages 9-11 of the specification and as depicted in Figures 3-6.



## **Issues**

Issue 1 - Whether claims 1-19 and 26 are patentable under 35 U.S.C. § 103 over Sullivan et al. in view of Kasashima et al.?

Issue 2 - Whether claims 20-25 are patentable under 35 U.S.C. § 103 over Boehm in view of Kasashima et al.?

Issue 3 - Whether claims 1-19 and 26 are patentable under 35 U.S.C. § 112, second paragraph?

Issue 4 - Whether rejection of claims 1-26 for double patenting is a proper rejection when it necessitates the combination of references, and furthermore when one of the references cited is both not commonly owned and does not share any common inventors?

## **Grouping of Claims**

For each ground of rejection, contested by Appellants herein, that applies to more than one claim, such additional claims, to the extent separately identified and argued below, do not stand or fall together.

## **The Argument**

To provide perspective to Appellants' discussion as to each art rejection, Issues 1-4, Appellants direct the

Board's attention to the following statement made by the Patent Examiner with respect to each art rejection:

The Examiner has stated that "[i]t would have been obvious to one having ordinary skill in the art at the time of the invention was made to add the dimples of Kasashima et al., having any number of rows, to the golf ball of Sullivan et al. in order to improve the flight performance of the golf ball." This conclusory statement is an improper standard of obviousness as it relies upon hindsight reasoning.

The Examiner has further stated that "[i]t is also noted that dimple arrangement set forth in Figure 1 may be adjusted without departing from the ranges set forth; therefore, to have any number of rows within the triangles would constitute as a design choice." This rejection is improperly based upon an obvious-to-try standard that has been found to be an unacceptable standard to produce a valid prime facie obviousness rejection.

**Issue 1 - Whether claims 1-19 and 26 are patentable under 35 U.S.C. § 103 over Sullivan et al. in view of Kasashima et al.?**

Independent claim 1 recites a two-piece golf ball comprising a core having a compression in the range of

about 75 PGA to about 89 PGA. The golf ball has a cover with a Shore D hardness in the range of about 42 Shore D to about 60 Shore D. The outer surface is divided into a plurality of polygonal configurations that include polar triangles. A plurality of dimples comprising sets of dimples having different diameters are arranged on the outer surface. The polar triangles only contain dimples from one set.

U. S. patent 6,193,616 to Sullivan, ("the Sullivan '616 patent"), teaches a core and cover. The Sullivan '616 patent is silent with respect to specific dimple patterns and provides no motivation to produce Applicants' claimed dimple pattern. The cover taught in the '616 patent is different from the Applicants' cover as precisely claimed in claim 4. The Examiner has stated that 83-84 Shore C, taught in the '616 patent, is equivalent to that of the Appellants' claimed range of 55-56 Shore D. The Appellants respectfully disagree with the Examiner's conversion of 83-84 Shore C to 55-56 Shore D. The Appellants have calculated the conversion to be about 61 Shore D, outside of the claimed range.

U.S. Patent 6,241,627 to Kasashima et al., ("the '627 patent"), is directed to a series of polygonal configurations, including an icosahedron, but without any

polar triangles. The Appellants' specification defines and the claims include polar triangles as separate configurations having specific patterns different from equatorial triangles. In contradistinction, the '627 patent teaches an "arrangement unit" in which all triangles are identical to each other in all the described embodiments. The '627 is silent with respect to the use of a single great equatorial mold parting line free of dimples.

Figures 1 and 2 and the abstract of the '627 patent was cited by the Examiner as being relevant to the teaching of the Applicants' invention. The abstract of the '627 is reproduced below for convenience of review:

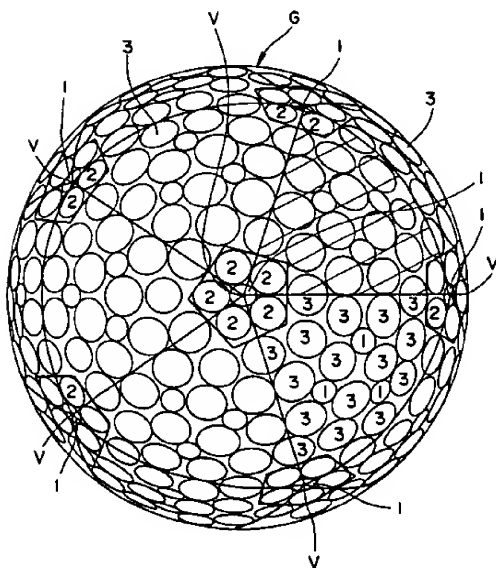
A golf ball has plural types of dimples on a spherical surface, which is assumed to be a regular icosahedron having twenty triangles. Apexes of five triangles join together at a vertex. **Those dimples arranged in each triangle constitute an arrangement unit.** A first dimple having a smallest diameter is located at the vertex, and second dimples having a greater diameter are equidistantly arranged around the first dimple. When a pentagon which circumscribes the second dimples is drawn, an average depth of those dimples located within the pentagon is up to 85% of the average depth of those dimples located in the remaining areas. (emphasis added)

The Examiner states with respect to the teaching of the '627 patent that "the dimples in each triangle

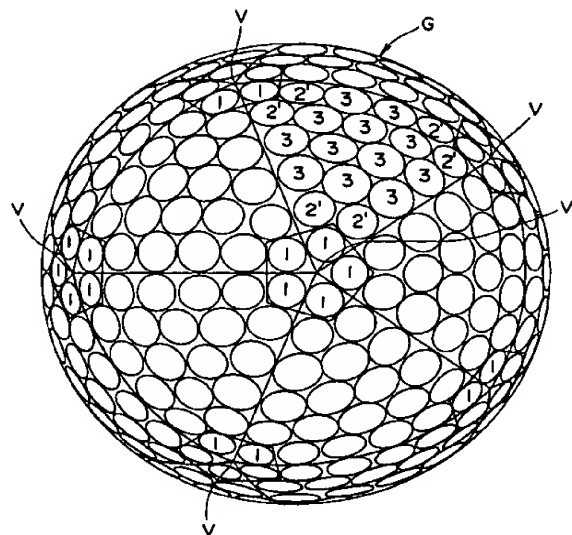
constitute an arrangement unit." This interpretation is correct and is significant in that it clearly teaches away from the Appellants' claimed invention. The '627 patent defines an arrangement unit as a pattern that is repeated in every triangle. Regardless of the Examiner's apparent confusion over sets, it is clear that the Appellants' triangles are not uniform in that polar triangles are distinguished from other triangles in the drawings and in the specification, and are distinctly claimed to emphasize that feature. The '627 patent teaches in column 1 lines 63-67 that "[t]he golf balls having dimples arranged according to the first and second embodiments, when hit with a driver, exhibit excellent flight performance and aerodynamic symmetry."

Figures 1 and 2 are reproduced on the following page for convenience of review:

**FIG.1**



**FIG.2**



The Examiner incorrectly asserts that: "Figure 2 shows a golf ball in which dimples do not intersect the great circle line." Figure 2 of the '627 patent is completely devoid of any such depiction and every line drawn intersects a dimple. The figure speaks for itself; only the Appellants' specification and Appellants' Figure 2 contains a great circle line that does not intersect any dimples. The Examiner's position is tantamount to reading into the '627 patent Appellants' great circle path being free of any intersection with any dimple. The incorporation of Applicants' disclosure into the '627 patent is clearly improper and not subject to any reasonable justification.

The Examiner's rejection further stated that "[i]t is also noted that dimple arrangement set forth in Figure 1 may be adjusted without departing from the ranges set forth; therefore, to have any number of rows within the triangles would constitute as a design choice." This rejection is conclusory in nature and an admission by the Examiner that the '627 patent is devoid of any teaching or motivation to arranging the dimples into polar triangles that are divided into seven rows, and equatorial triangles that are divided into eight rows to obtain an outer surface consisting of subdivided triangles.

Contrary to Appellants' claims, the '627 patent teaches that the dimples are placed into "an arrangement unit" with each triangle having the same pattern and therefore teaches away from having different arrangements of dimples in triangles positioned on the ball. It is therefore not a "design choice" or an "adjustment" to place dimples in a pattern contrary to the teaching required by the '627 patent. Furthermore, the placement of dimples in the '627 patent is dictated by their diameters with the smallest being placed at the vertex. (see '627 patent abstract)

Whether or not disclosures in two or more prior art references are properly combinable depends, generally, on whether there is some teaching, suggestion or motivation in those references or elsewhere in the prior art to suggest the desirability of making the combination. The mere fact that it is possible to find isolated disclosures having some individual features that might be combined in a manner that would result in the claimed invention is not enough. There must be something in the prior art itself that suggests the desirability of the claimed combination. It is improper to pick and choose among the individual parts of various prior art references as a mosaic to recreate a facsimile of the claimed invention using the inventors'

disclosure as an instruction book or blue print on how to reconstruct the prior art. To do so is impermissible hindsight reasoning. Additionally, the problem confronted by the inventor must be considered in determining whether it would have been obvious to combine the references in that manner to solve a particular problem. See *In Re Sang Su Lee*, 277 F.3d 1338, 61 U.S.P.Q.2d 1430 (Fed. Cir. 2002) and *In Re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596, 1599 (Fed. Cir. 1988).

With respect to the Appellants first embodiment, as typified by claim one, the cited art combination fails to teach a polar triangle having dimples from only one set regardless if the set is defined by diameter or depth, the '627 not only fails to teach this limitation, it actually teaches away from the Appellants claimed invention. The '627 patent teaches away from the Appellants' first embodiment having multiple sets of dimples with the polar triangles having dimples from only one set because it is contrary to the use of an identical repeating "arrangement unit" on all polygonal configurations. With respect to the same argument, the combination also teaches away from the Appellants' third claimed embodiment.

The '627 patent with respect to the Appellants' fourth embodiment of arranging dimples into rows, specifically



polar triangles into seven rows and equatorial triangles into eight rows, fails not only to motivate or guide one skilled in the art to produce the Appellants' claimed invention but also teaches away from the claimed invention.

The '627 patent with respect to the Appellants' fifth embodiment of arranging dimples along borders and vertices, specifically equatorial triangles that are different from polar triangles, fails not only to motivate or guide one skilled in the art to produce the Appellants' claimed invention but also teaches away from the claimed invention by requiring all triangles to be identical, as discussed above in a repeating "arrangement unit."

A prior art reference must be considered for all it teaches and discloses including disclosure that teaches away from the invention. *Ashland Oil, Inc. v. Delta Resins & Refractories, Inc.*, 776 F.2d 281, 227 U.S.P.Q. 657 (Fed. Cir. 1985), cert. Denied, 475 U.S. 1017 (1986). To do otherwise would allow references to be considered piece meal, and an applicant's disclosure to be considered as a blue print, the "essence of hindsight". *In Re Dembiczak*, 175 F.3d at 999 (internal citation omitted). As discussed above, the teaching of an "arrangement unit" is clearly opposite to the Appellants' claimed invention. The Appellants' claims are therefore allowable over the cited

combination, which fails to teach each and every claim limitation either singly or in combination. Reversal of the rejection is respectfully requested.

**Issue 2 - Whether claims 20-25 are patentable under 35**

**U.S.C. § 103 over Boehm in view of Kasashima et al.?**

Independent claim 20 defines a two-piece golf ball comprising a core having a compression in the range of about 68 PGA to about 78 PGA, with a cover having a Shore D hardness in the range of about 42 Shore D to about 60 Shore D, and an outer surface divided into a plurality of polygonal configurations, which include triangles, and at least 392 dimples arranged on the outer surface, with a first pattern of dimples associated with each triangle, a second pattern of dimples associated with each triangle, wherein said dimples are essentially circular with each one of said dimples having a size defined by a diameter in the range of about 0.13 inches to about 0.15 inches, and a depth in the range of about 0.0025 inches to about 0.125 inches.

U. S. patent 6,218,453 to Boehm, ("the '453 patent"), teaches a core and cover. However, the '453 patent is silent regarding specific dimple patterns and provides no motivation to produce the Appellants' claimed dimple pattern. The '453 patent does not motivate one skilled in

the art to have triangles having two distinct dimple patterns on the ball. As discussed above, the '627 patent teaches that the "arrangement unit" of each triangle is repeating. Therefore, the combination of the '453 patent and the '627 patent fails to teach each and every limitation of the Appellants' claim 20.

Additionally, the Boehm '453 patent does not teach Appellants' dependent claim 21 directed to a third embodiment wherein the cover is a blend of polymers comprising a terpolymer of ethylene/methacrylic acid/n-butyl acrylate and a copolymer of ethylene/ methacrylic acid wherein and having a hardness of 53 to 59 Shore D. Boehm does not teach the benefit of the use of a butyl terpolymer over other terpolymers and does not describe the use of either of Appellants SURLYN® grade ionomers. The Appellants' specific cover blend with a n-butyl acrylate provides exemplary cover characteristics compared to other alkyl groups. Therefore, not only is the combination insufficient to teach claim 20, it is insufficient to teach the limitations of claim 21.

U.S. Patent 6,241,627 to Kasashima et al., ("the '627 patent"), as discussed in great detail above, is directed to a series of polygonal configurations, including an icosahedron, having only one repeating pattern or

"arrangement" of dimples on each triangle. The Appellants' independent claim 20 distinctly points out and claims at least one additional and different dimple pattern placed on triangles not present on other triangles. The Appellants refer the board to the extensive discussions of the teaching of the '627 patent as to why it teaches away from the Appellants' claimed dimple pattern. It should also be noted with respect to the third embodiment that it is not obvious to have at least 392 dimples because the '627 patent teaches that having as few as 252 dimples is acceptable.

Once again, the legal requirement to provide specific evidence of a teaching, suggestion or motivation to combine what is alleged to be commonly known with a prior art reference has not been met. See, *In Re Hans Oetiker*, 977 F.2d 1443, 1446-47; 24 U.S.P.Q.2d 1443 (Fed. Cir. 1992) (taking notice of common everyday mechanical concepts is not sufficient to obviate an invention without giving reasons why). The Appellants respectfully request allowance of claims 20-25 based on the cited art combination being improper and insufficient for failing to teach or suggest each and every element of the claimed invention.

**Issue 3 - Whether claims 1-19 and 26 are patentable under 35 U.S.C. § 112, second paragraph?**

The claims are to be interpreted under their ordinary and normal meaning using the specification as a guide. The specification defines a set of dimples as being a group of dimples sharing the same diameter. In review of claim one both on its face using plain language it is clear that the claimed golf ball contains more than one dimple "plurality of dimples" and more than one set. The polar triangles are limited to dimples from only one set. This statement is believed to address and overcome the rejection under 35 USC 112, second paragraph. If the language of claims 1-19 and 26 are deemed to cause confusion after review by the board the Appellants will amend the claims upon resolution of the obviousness issues.

**Issue 4 - Whether rejection of claims 1-26 for double patenting is a proper rejection when it necessitates the combination of references, and furthermore when one of the references cited is both not commonly owned and does not share any common inventors?**

The Appellants traverse the double patenting rejection as presented by the examiner as being improperly treated as a non-statutory double patenting rejection. The

Appellants' claimed invention is patentably distinct from U.S. Patent 6,383,093, which is admitted by the examiner. It is further patentably distinct from the combination with Sullivan USPN 6,193,616.

The '093 specification and claims cited by the examiner teach a completely different dimple pattern and dimple placement that has no commonality in teaching, only ownership. Whereas the instant invention teaches polar triangles, U.S. Patent 6,383,093 teaches the use of only pentagons at the poles. Therefore the cited combination is improper for failing to teach the same claimed subject matter, because there are no polar triangles taught in the cited combination. The examiner must interpret the claims in light of the teaching of the specification.

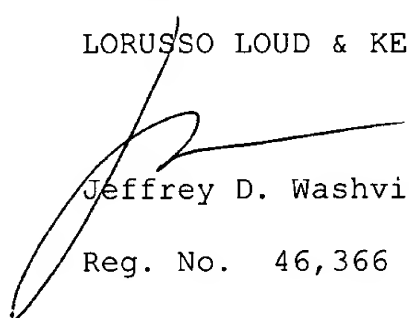
The cited patent owned by the Appellants is a different invention with very few features in common with the present invention other than ownership. The disclosed dimple pattern teaches away from the Appellants' claims. Therefore, it is clearly improper to base this double patenting rejection on the combination. The Appellants respectfully request reconsideration and removal of the double patenting rejection.

**Conclusion**

For the extensive reasons advanced above, Appellants respectfully contend that each claim is patentable. Reversal of all rejections is courteously solicited. It is requested that all rejections be withdrawn and the application be passed to issue.

Respectfully submitted,

LORUSSO LOUD & KELLY LLP



Jeffrey D. Washville

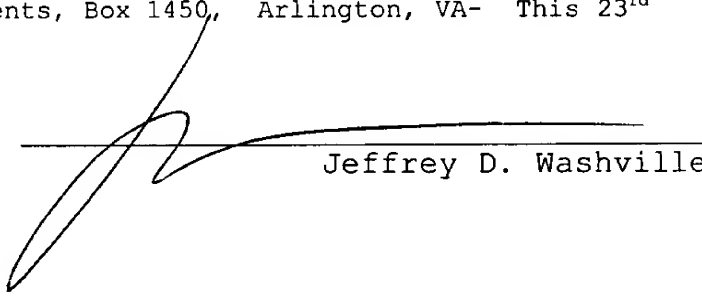
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Jeffrey D. Washville

**Appendix**

1. A two-piece golf ball comprising:

a core having a compression in the range of about 75 PGA to about 89 PGA;

a cover having a Shore D hardness in the range of about 42 Shore D to about 60 Shore D;

an outer surface divided into a plurality of polygonal configurations, which include polar triangles; and,

a plurality of dimples comprising sets of dimples having different diameters arranged on the outer surface, wherein the polar triangles only contain dimples from one set.

2. The ball of claim 1 wherein the core has a diameter in the range of about 1.535 inches to about 1.545 inches.

3. The ball of claim 1 wherein the core has a weight in the range of about 36.25 grams to about 37.25 grams.

4. The golf ball of claim 1 wherein the cover further comprises:

a blend of polymers wherein said blend comprises:

a terpolymer of ethylene/methacrylic acid/n-butyl acrylate; and,



a copolymer of ethylene/methacrylic acid wherein said blend has a hardness of 53 to 59 Shore D.

5. The golf ball of claim 4 wherein said terpolymer has a melt index of about 0.5 to 3 g/10 minutes.

6. The golf ball of claim 4 wherein said copolymer has a melt index of about 2 to 6 g/10 minutes.

7. The ball of claim 1 wherein the cover has a thickness of about 0.070 inches.

8. The golf ball of claim 1 wherein said outer surface is divided into a polyhedron defined as an icosahedron.

9. The golf ball of claim 8 further comprising twenty triangles for further dividing said outer surface, said triangles consist of a plurality of polar triangles and a plurality of equatorial triangles, wherein said polar triangles are divided into seven rows, and said equatorial triangles are divided into eight rows to obtain an outer surface consisting of subdivided triangles.

10. The golf ball of claim 1 further comprising:

a first set of dimples, with each dimple in the first set having a first size;

a second set of dimples, with each dimple in the second set having a second size, wherein the plurality of dimples are selected from the first set of dimples, and the second set of dimples.

11. The golf ball of claim 9 wherein sides of said polar triangles bisect dimples only from said first set of dimples and wherein said vertices of said polar triangles intersect said midpoint of dimples only from said first set of dimples.

12. The golf ball of claim 8 wherein said sides of said equatorial triangles bisect dimples only from said second set of dimples and wherein said vertices of said equatorial triangle are selected from said first set of dimples.

13. The golf ball of claim 9 wherein sides of each polar triangle are intersected by at least one dimple from the first set of dimples.

14. The golf ball of claim 9 wherein the common sides of each equatorial triangle are intersected by a dimple from the second set of dimples.

15. The golf ball of claim 1 further comprising:

two poles,

an uninterrupted equatorial great circle path that is free of dimples and that defines a mold line symmetrically positioned with respect to said two poles on said outer surface; and

a pair of first polygonal configurations each being located on opposite sides of said outer surface with respect to mold parting line to include one of said two poles symmetrically arranged within its boundaries.

16. The golf ball of claim 13 wherein said uninterrupted equatorial great circle path is not intersected by any dimples.

17. The golf ball of claim 1 wherein said dimples are essentially circular with each one of said dimples having a size defined by a diameter in the range of about 0.13 inches to about 0.15 inches, and a depth in the range of about 0.0025 inches to about 0.125 inches.

18. The golf ball of claim 1 wherein the total number of dimples is at least 392.

19. The golf ball of claim 4 wherein said terpolymer is 30% to 80% by weight of said blend and said copolymer is 20% to 40% of said blend.

20. A two-piece golf ball comprising:

a core having a compression in the range of about 68 PGA to about 78 PGA;

a cover having a Shore D hardness in the range of about 42 Shore D to about 60 Shore D; and

an outer surface divided into a plurality of polygonal configurations, which include triangles; and,

at least 392 dimples arranged on the outer surface, with a first pattern of dimples associated with each triangle, a second pattern of dimples associated with each triangle, wherein said dimples are essentially circular with each one of said dimples having a size defined by a diameter in the range of about 0.13 inches to about 0.15 inches, and a depth in the range of about 0.0025 inches to about 0.125 inches.

21. The golf ball of claim 20 wherein the cover further comprises:

a blend of polymers wherein said blend comprises:

a terpolymer of ethylene/methacrylic acid/n-butyl acrylate; and,

a copolymer of ethylene/methacrylic acid wherein said blend has a hardness of 53 to 59 Shore D.

22. The golf ball of claim 21 wherein said terpolymer is 30% to 80% by weight of said blend and said copolymer is 20% to 40% of said blend.

23. The two-piece golf ball of claim 20 wherein the plurality of polygonal configurations, which includes triangles has polar triangles and equatorial triangles.

24. The two-piece golf ball of claim 23 further comprising:

a first pattern of dimples associated with each polar triangle having dimples from only one set, wherein the at least 392 dimples are selected from sets of dimples with different diameters arranged on the outer surface.

25. The two-piece golf ball of claim 23 further comprising:

a second pattern of dimples associated with each equatorial triangle having dimples from all sets, wherein the at least 392 dimples are selected from sets of dimples with different diameters arranged on the outer surface.

26. A two-piece golf ball comprising

a core having a compression in the range of about 75 PGA to about 82 PGA;

a cover having a Shore D hardness in the range of about 42 Shore D to about 60 Shore D;

an outer surface divided into a plurality of polygonal configurations, which include polar triangles; and,

a plurality of dimples comprising sets of dimples having different diameters arranged on the outer surface, wherein the polar triangles only contain dimples from one set.